CURRICULUM VITAE

Name: Marzieh Sadat Surname: Hosseini

Date of birth: 04-June-1986

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> EDUCATION

2016- Present Ph.D. in Nanotechnology

Sharif University of Technology

2012-2014 M.Sc. in Nanochemical engineering

Shiraz University

2006-2010 B.Sc. in Chemical engineering

Jondi Shapour University of Technology

PhD. Thesis Design of a QCM biosensor for detection of breast cancer cells.

Supervisor: Prof. Azam Iraji Zad

Prof. Manouchehr Vossoughi

M.Sc. Thesis Design and fabrication of gas sensor based on metal-organic frameworks for

detection of Volatile Organic Compounds (VOCs).

Supervisor: Dr. Sedigheh Zeinali

B.Sc. Thesis Modeling of industrial wastewater treatment unit by Aspen Plus (Aspen +)

software

Supervisor: Dr. Khashayar Badii

> EDUCATIONAL AND WORK EXPERIENCE

1- e-learning teacher for nanostructure characterization lessons, Faradars Corporation, 2018

2- Department of Bio-system Engineering, Shahid Chamran University of Ahvaz, Ahvaz, Iran.

Teaching Assistant of quality evaluation of food products (subject: introduction and application of Nanotechnology), 2016

- 4- "Radin Faradid Petro Sanat" corporation in oil, gas and petrochemical Incubator Center, Fars Science and Technology Park, **Research assistant and staff, 2016.**
- 5- Official and financial staff at Abadan Ghadr corporation- subject: overhaul of Catalytic cracking unit (FCCU), 2011
- 6- Trainee at Abadan Oil Refinery, Refining Engineering Unit, 2009

> RESEARCH EXPERIENCE

- Metal-Organic Framework (MOF) synthesis
- Solvothermal particle/film synthesis
- Electrospinning and electrospray film coating
- Design and fabrication of capacitive sensor
- Design and fabrication of biosensor
- Design and fabrication of QCM sensor
- Electrochemical film synthesis
- Industrial wastewater treatment

> RESEARCH INTERESTS

- Capacitive sensor
- Quartz Crystal Microbalance (QCM) sensor
- Film coatings
- Nano-biosensor
- Nano-biotechnology

> HONORS & AWARDS

- Doing M.Sc. Thesis based on industrial and research requirement of Abadan Oil Refinery so taking award from Abadan Oil Refinery, 2015.
- Taking award from Iran Nanotechnology Initiative Council (INIC) for doing M.Sc. industrial thesis about nanotechnology, **2015**.
- Taking award from Iran Nanotechnology Initiative Council (INIC) for publishing paper about nanotechnology, **2016**.

> PROFESSIONAL SOCIETY MEMBERSHIPS

- **Member** of Iranian Tissue Engineering and Regenerative Medicine Society (ITERMs), Tehran, **2018** till present.
- Member of Central Council of scientific association, Shiraz University, 2014-2015.
- Member of Policy Council of 3rd congress of Nano Science and Nanotechnology spring school, Shiraz University, **2015.**
- Member of Policy Council of 2rd congress of Nano Science and Nano technology spring school, Shiraz University, **2014.**

> LIST OF PUBLICATIONS

> Journal Papers

1. **Hosseini, M S.,** Zeinali, S., Sheikhi, M H., Fabrication of capacitive sensor based on Cu-BTC (MOF-199) nanoporous film for detection of ethanol and methanol vapors. *Sensors and Actuators B* 230 (2016) 9–16.

2. Zeinali, S., **Hosseini M S.**, Capacitive humidity sensing using metal-organic framework (Cu-BTC) nanoporous thin film fabricated through electrochemical in situ growth. *J. Mater. Sci. Mater. Electron.* (2018) DOI: 10.1007/s10854-018-00652-8.

Conference Papers

- 1- **Hosseini, M S.,** Zeinali, S., Electrochemical synthesis and insitu film growth of Cu-BTC thin film for capacitive humidity sensing. *7th International Congress on Nanoscience & Nanotechnoloy (ICNN* **2016**).
- 2- **Hosseini, M S.,** Zeinali, S., Sheikhi, M H., Fabrication of Novel Capacitive Nanosensor Based on Metal Organic Frame Work (Cu-BTC) in Order to Gas Sensing. 5th International Congress on Nanoscience & Nanotechnolog (ICNN 2014).
- 3- **Hosseini, M S.,** badii, Kh., Application of Aspen Plus software in designing of coagulation and flocculation circuits of industrial wastewater treatment systems, 5th National Conference & Exhibition on Environmental Engineering (2012).

> SKILLS

Software

- Material studio (Molecular dynamic simulation software)
- Aspen+
- Matlab
- MS Office (Word, Excel, PowerPoint)
- Endnote
- Photoshop

Language

- Farsi (Native)
 English
- MSRT (Ministry of Science, Research and Technology): 69/100

> RELATED & TRAINING EXPERIENCES

- Capacitate workshop of nanothecnology, Iran Nanotechnology Initiative Council (INIC), Tehran, 2014.
- Creativity and innovation workshop, Shiraz University, Shiraz, 2014.
- Designing business plan (BP) and entrepreneurship workshop, Shiraz University, Shiraz, 2014.
- Numerical optimization workshop, Shiraz University, Shiraz, 2014.
- Interior manager of 2rd congress of Nano Science and Nanotechnology spring school, Shiraz University, Shiraz, 2014.
- Connecter of Iran Nanotechnology Initiative Council (INIC) and Shiraz University, 2014-2015.
- Interior manager of 3rd congress of Nano Science and Nanotechnology spring school, Shiraz University, Shiraz, 2015.

- Capacitate workshop of nanothecnology, Iran Nanotechnology Initiative Council (INIC), Tehran, 2015.
- KAB entrepreneurship course, Technical & Vocational Training Organization, Shiraz, 2015.
- Material studio (molecular dynamic simulation software) workshop, 2015.
- Nano-biotechnology workshop, Iran University, Tehran, 2016.
- Atomic Force Microscopy (AFM) workshop, 7rd international conference of nanoscience and nanotechnology (ICNN), Kharazmi University, Tehran, **2016**.
- Nano safety workshop, Sharif University of technology, Tehran, 2017.
- Administrative staff of International Conference of Nanoscience and Nanotechnology (ICNS),
 Sharif University of technology, Tehran, 2018.
- Tissue Engineering and 3D printing workshop, Sharif University of technology, Tehran, 2018.
- The first conference of Tissue Engineering and Regenerative Medicine, Tehran university of medical sciences, Tehran, 2018.

> REFERENCES

- Sedigheh Zeinali, associate professor at Nanochemical Engineering Department, College of Advanced Technologies, Shiraz University, Shiraz, Iran. E-mail: Zeinali@shirazu.ac.ir
- Azam IrajiZad, professor in Physics Department and Institute for Nanoscience and Nanotechnology (INST), Sharif University of technology, Tehran.
 E-mail: Iraji@sharif.edu
- Manouchehr Vosoughi, professor in Chemical and Petroleum Engineering Department, Sharif University of technology, Tehran.
 E-mail: vosoughi@sharif.edu
- Mohammad Hossein Sheikhi, Professor at Telecommunication and Electronic engineering Department, electrical engineering and computer science college, Shiraz University, Shiraz, Iran. E-mail: Msheikhi@shirazu.ac.ir
- Davoud Kazemi, HR officer at Iran Nanotechnology Initiative Council (INIC), Tehran, Iran. E-mail: Kazemidavoud@yahoo.com